



<http://institutes.lanl.gov/isti/summer-school/>  
<http://newmexicoconsortium.org/probe/summer>

## HOW TO APPLY

Applications will be accepted  
**JANUARY 5, 2015 — FEBRUARY 11, 2015**

CS/CE/EE Undergraduate Students are Encouraged to Apply.

- Submit a current resume;
- Official University Transcript (with spring courses posted and/or a copy of spring 2015 schedule) 3.0 GPA minimum;
- One Letter of Recommendation from a Faculty Member; and
- Letter of intent stating strengths, goals, and interests.

Send all application materials to:

Information Science & Technology Institute  
 Los Alamos National Laboratory  
 Mail Stop T001  
 Los Alamos, NM 87545

Email: [apply-cscnsi@lanl.gov](mailto:apply-cscnsi@lanl.gov)  
 Voice: 505-663-5725  
 Fax: 505-663-5225

Students will be notified of selection by the end of February 2015.

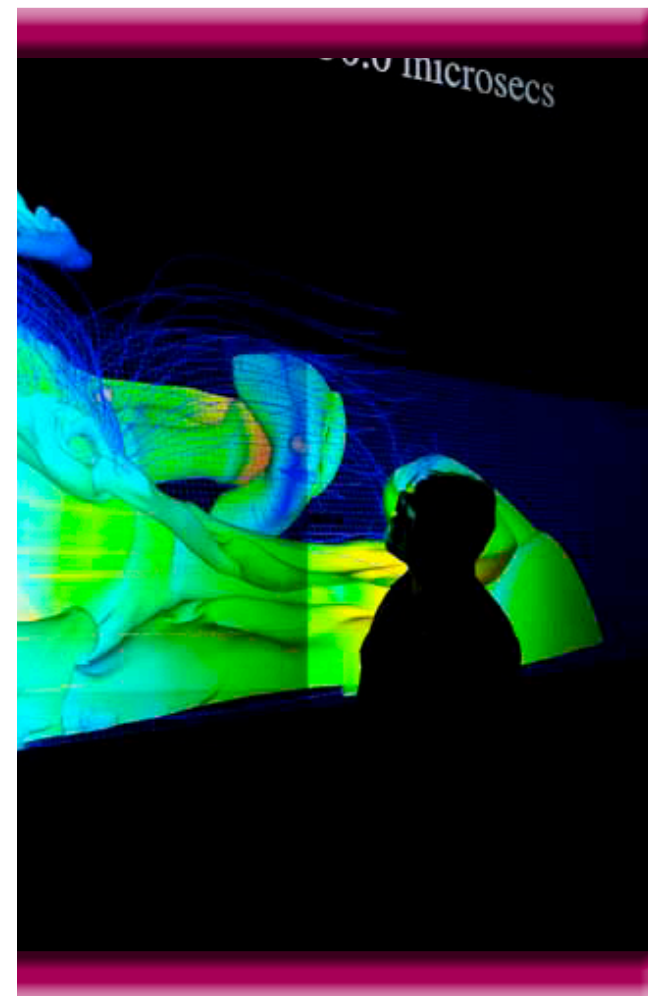
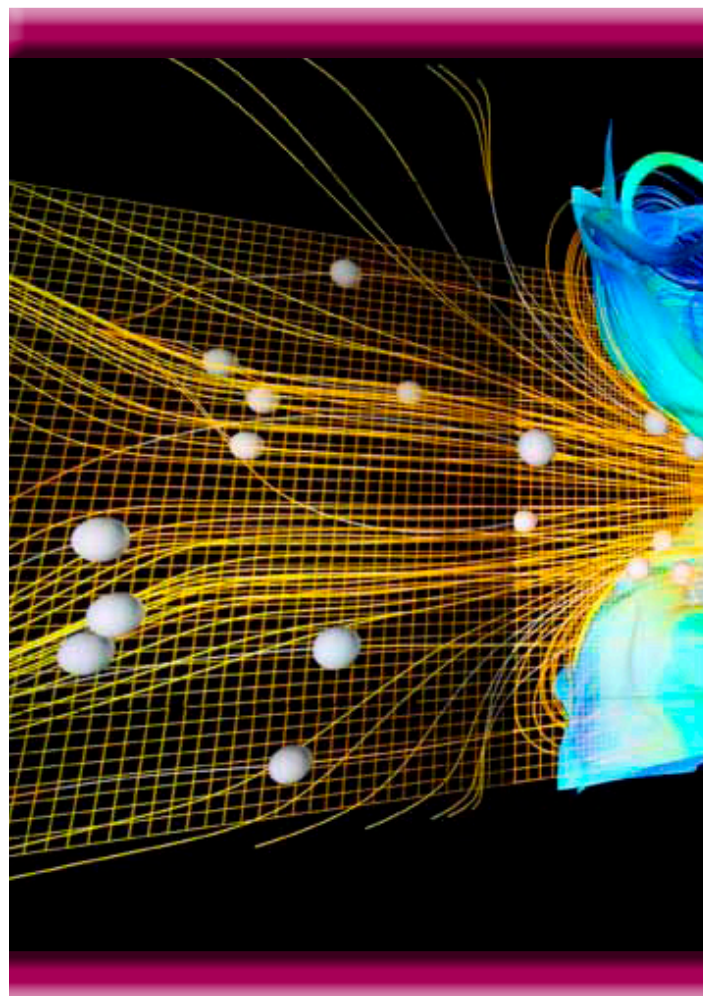


New Mexico Consortium and  
 Los Alamos National Laboratory

2015

# Computer System, Cluster, and Networking Summer Institute

An NSF-sponsored undergraduate summer institute



# Computer System, Cluster, and Networking Summer Institute

## Purpose

The Computer System, Cluster, and Networking Summer Institute (CSCNSI) is a focused technical enrichment program targeting third-year college undergraduate students currently engaged in a computer science, computer engineering, or similar major. The program emphasizes practical skill development in setting up, configuring, administering, testing, monitoring, and scheduling computer systems, supercomputer clusters, and computer networks through a variety of activities including hands-on technical training, lectures, professional development seminars, and tours of LANL facilities.

Students work in small project teams to execute real-world projects on computer clusters that they assemble and configure. A university instructor provides class instruction, and LANL subject matter experts mentor team projects. Students develop written and oral communications skills through critiqued presentations and present their work at a technical poster session at the conclusion of the Summer Institute. The CSCNSI is also an innovative, proactive approach to making the students aware of career possibilities within the Laboratory.

## Description

The Information Science and Technology Institute (ISTI) and the New Mexico Consortium (NMC) are soliciting undergraduate student applicants for the Summer Institute 2015.

During the nine-week Institute, students will receive technical training/lectures, professional development seminars, and laboratory experience with LANL staff and an experienced university instructor. A hands-on computer system laboratory/machine room fully

populated with unassembled computer nodes, networking equipment, and assorted equipment, cables, and supplies are provided.

Additionally, practical skill development in setting up, configuring, administering, testing, monitoring, and scheduling computer systems, supercomputer



Students presentation on summer project work

clusters, and computer networks will be emphasized and facilitated. Technical breadth will be developed

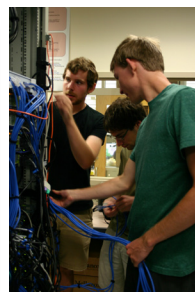
via exposure to a variety of key topics, technologies, and problems of interest through participation in tutorials, seminars, guest lectures by computer professionals and scientists, as well as LANL facility tours. During the Institute, students will work in small project teams and will present their work in a technical forum. A University faculty instructor and LANL mentors will be available as resources throughout the summer.

## Students

This highly-selective program is designed for third year (i.e., Junior) and above undergraduate students, although in some cases, Sophomore applicants may be considered. Acceptance into the program will be based on academic record (3.0 GPA minimum), interest and goal statement, and a letter of recommendation.



Students testing QDR Infiniband hardware



Los Alamos Research Park

As a general guideline, students should have experience with the LINUX operating system and sufficient academic achievement to make them eligible graduate school candidates upon completion of their undergraduate program. CS and EE/CE students from US universities will be considered. This program is limited to US citizens.

## Duration and Location

The summer school program will last nine weeks, June 1 through July 31, and will be held at the New Mexico Consortium (NMC) in Los Alamos, NM.

## Faculty

A New Mexico Consortium instructor will conduct lectures and supervise machine room activities. In addition, Laboratory staff will provide guest lectures on a diverse set of research topics, as well as technical mentor projects.



Dane Gardner  
CSCNSI Instructor

*"I learned more this summer in a very short amount of time than I think I have learned in any class I have taken at school. It's a fantastic educational experience." — 2012 Student*

*"I feel accomplished by being able to setup and configure a working cluster during bootcamp. It was also a great achievement to get up to speed on a topic I had no previous knowledge of for my research project. In doing so I was able to contribute to the project greatly." — 2013 Student*

*"There is no other place where you can gain this amount of knowledge in a summer on top of making connections with intelligent people that are enthusiastic about us and their research." — 2014 Student*